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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,773	09/19/2003	Brett D. Niver	EMS-06101	9431
7590 Choate, Hall & Stewart Patent Group Exchange Place 53 State Street Boston, MA 02109-2804		05/22/2007	EXAMINER PEYTON, TAMMARA R	
			ART UNIT 2182	PAPER NUMBER
			MAIL DATE 05/22/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,773

Applicant(s)

NIVER ET AL.

Examiner

Tammara R. Peyton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Fee et al.

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As per claims 1-43, Fee teaches a method for distributed lock management comprising:
determining, by a requesting node requesting a lock, a current lock owner of the lock in accordance with an indicator specifying which one or more nodes are available as lock owners; and sending a lock request message to said current lock owner; and wherein said requesting node waits for an indication as to whether the lock request message has been granted or denied, and said determining is performed by said requesting node prior to said sending for each request. (Abstract, cols. 3-6 and 11)

Fee teaches the use of a lock that will remains active until the request has been satisfied. Specifically, once a lock is set all subsequent requests to the same address block their memory access and set a resource-need for the owning requester to complete. This resource-need prevents further pipeline accesses until the owning request completes. The owning request is then free to change the ownership status of the line, if necessary, and return the requested data to the requesting processor. Each request will busy the pipe, and other resources, only to set its resource-need for the newly designated owner. Once the new owner completes the process starts again. With each completion, the priority mechanism is tested again and resources busied causing increased traffic and latency. In addition, a completed processor may issue another request to the same address before all processors have accessed the data. Since the priority logic has been optimized for best-case, and due to inherent

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latency with the request generation after a lock is cleared, the new request can beat those waiting.

Claims 1-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Jeffords et al. (US 6,510,478).

As per claims 1-43, Jefford teaches a method for distributed lock management comprising: determining, by a requesting node requesting a lock, a current lock owner of the lock in accordance with an indicator specifying which one or more nodes are available as lock owners; (col. 6, lines 33-col.7, lines 1-27) and sending a lock request message to said current lock owner; and wherein said requesting node waits for an indication as to whether the lock request message has been granted or denied, and said determining is performed by said requesting node prior to said sending for each request. (Abstract, cols. 3-9)

Jefford teaches a computer-implemented method of controlling access to an object shared amongst a plurality of processes in a distributed system includes steps of assigning one process as an owner of a lock associated with the shared object; when a process requires access to the shared object, the process requesting the lock from the lock owner process; when the lock owner process receives the lock request, the lock owner process determining whether or not any process has control of the lock; and when the lock owner process determines that no process has control of the lock, the lock owner process

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granting control of the lock to the requesting process. A particular process may be the lock owner for different shared objects. The other processes in the system will be referred to as peer processes. In order to obtain the lock for the shared object the lock owner or a peer process sends a lock request message to the lock owner process and waits for the lock to be granted. If the lock owner process fails or changes while the requesting process is waiting for the lock to be granted, a new lock request message is sent to the new lock owner process. Once the lock is granted, the requesting process holds the lock, i.e., becomes the "lock holder" process, until it releases the lock back to the lock owner process by sending a release lock message. If the lock owner process fails while the lock holder process holds the lock, the release lock message is sent to the new owner of the lock. If the lock holder process fails, the lock will be released so that a next requesting process may acquire it.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (571) 272-4157. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature of relating to the

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status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

(571) 273-8300

Hand-delivered responses should be brought to:

USTPO, Randolph Building, Customer Service Window

401 Dulany Street

Alexandria, VA 22314.

TAMMARA PEYTON
PRIMARY EXAMINER

A handwritten signature in cursive script, appearing to read 'Tammara Peyton', written in black ink.

Tammara Peyton

April 25, 2007